

CLAIMS

What is claimed is:

- 1 1. A method a producing a mold from which a custom-fit implant may be directly
- 2 manufactured, the method comprising:
 - 3 receiving medical image data representing surrounding portions of a
 - 4 patient's anatomy to be repaired by surgical implantation of the custom-fit
 - 5 implant;
 - 6 performing three-dimensional surface reconstruction based on the medical
 - 7 image data;
 - 8 designing the custom-fit implant based on the three-dimensional surface
 - 9 reconstruction;
 - 10 creating a two-part mold with a void in the shape of the custom-fit implant
 - 11 by subtracting a representation of the custom-fit implant from a representation of
 - 12 a mold; and
 - 13 outputting the two-part mold from which the custom-fit implant may be
 - 14 directly manufactured.